Project Design Phase-II
Solution Requirements (Functional & Non-functional)

Date	04 November 2022
Team ID	PNT2022TMID47880
Project Name	Fertilizer recommendation system for disease prediction
Maximum Marks	4 Marks

Functional Requirements:

Following are the functional requirements of the proposed solution.

FR No.	Functional Requirement (Epic)	Sub Requirement (Story / Sub-Task)
FR - 1	User Registration	Registration through Form Registration through Gmail
FR - 2	User Confirmation	Confirmation via Email Confirmation via OTP
FR - 3	Capture image	Capture image of the leaf and Check the parameter of the capture image
FR - 4	Image processing	Upload the image for the prediction of disease in the leaf
FR - 5	Leaf Identification	Identify the leaf predict the disease
FR - 6	Image description	Suggest the best fertilizer for disease

Non-functional Requirements:

Following are the non-functional requirements of the proposed solution.

FR No.	Non-Functional Requirement	Description
NFR-1	Usability	➢ Data sets of all leaves is used for detecting the disease that present in leaf
NFR-2	Security	➢ Information belongs to user and leaf are secured highly

NFR-3	**Reliability**	➢ Trustworthy ➢ Updates the leaf health periodically to the User ➢ It Ensure the health of plant for disease Prediction
NFR-4	**Performance**	The AI-based model is built by using Image/object recognition and classification using CNN. ➢ The user take images as input to detect Disease. ➢ Then Image Process and Determine the disease to recommend the Fertilizer
NFR-5	**Availability**	➢ Available Fertilizer and its Cost ➢ Amount of Usage of Fertilizer ➢ Prevention methods for crops.
NFR-6	**Scalability**	Through this system, the user can efficiently and effectively understand their: ➢ Best to Understand the Plant Pathology for User. ➢ Prediction of Disease lower the loss of crops production. ➢ Measure the affected Area.